International Journal of Research in MEDICAL SCIENCE

ISSN Print: 2664-8733
ISSN Online: 2664-8741
Impact Factor (RJIF): 8.35
IJRMS 2025; 7(2): 451-453
www.medicalpaper.net
Received: 04-10-2025
Accepted: 07-11-2025

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Radiological assessment of cystic lymphangioma at rare unusual location

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DOI: https://www.doi.org/10.33545/26648733.2025.v7.i2g.185

Abstract
There is a multiloculated cystic lesion with septations (fig. 1) of size approx. 6x7x4.5cm in length, anteroposterior and Transverse diameter respectively exhibiting minimal internal vascularity on Doppler assessment, located beneath the swelling at in the right anterior abdominal wall. Internal echoes suggestive of haemorrhage are present, and the cyst appears to originate from the anterior abdominal wall as observed on ultrasonographic evaluation. there was no deeper communication observed.

Keywords: Cystic Lymphangioma, rare location, Ultrasonography, Histopathology

Introduction

Case: A 7 month-old female child, with an uneventful perinatal history, reported to our outpatient department with complaints of swelling over right side of abdominal wall since birth. The swelling was painless and gradually increasing in size.

On Ultrasonography examination

Fig 1: Showing multiloculated cystic lesion with internal echoes.

Fig 2: shows not septal vascularity on doppler assessment

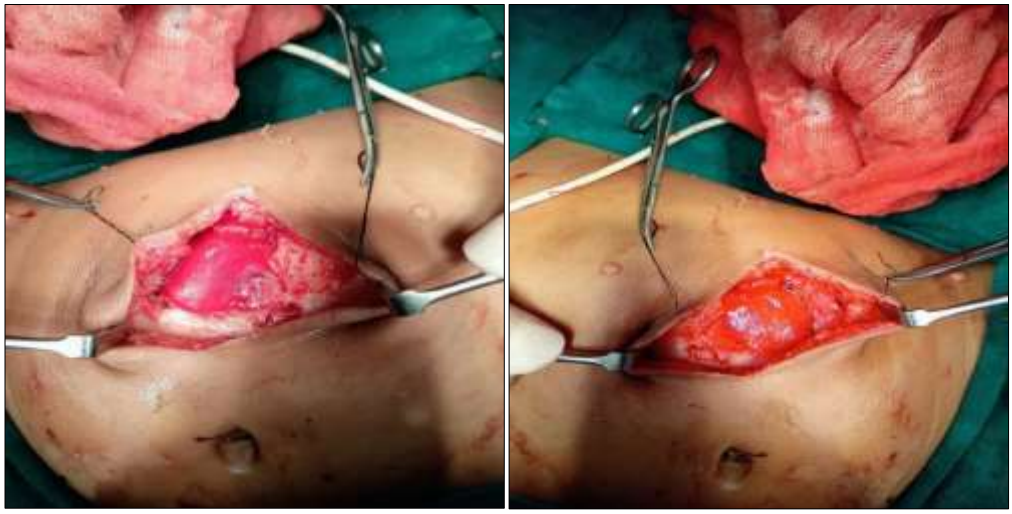

Fig 3: Further the patient underwent surgical resection Lymphangioma excision with romovac drain under GA.

1. No gross blood or purulent fluid was encountered upon entry into the abdomen. the cystic mass was immediately visible with no deeper communication.
2. Multiple cysts present over anterior abdominal wall on right side of size 5x2x2 cm.
3. **Content of cyst:** Serous/hemorrhagic.
4. Complete excision of cyst done and passed off as specimen for histological evaluation
5. Abdominal wall muscle and rectus sheath intact.
6. The specimen sent for the histopathological examination which shows the existence of lymphatic vessels dilated, lined with flattened endothelial cells without atypia, with abundant lymphoid tissue.

Histopathological examination

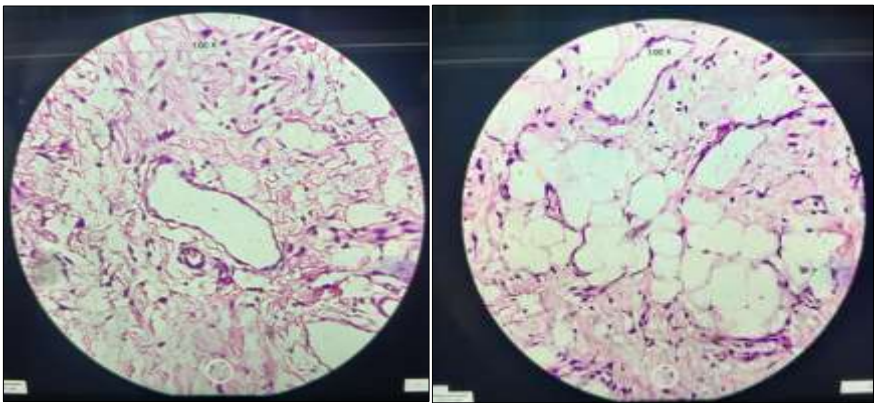

Fig 4: a and b H& E stained sections show a benign lymphangioma.

The lesion is composed of multiple dilated channels which are lined by flattened cells.
The stroma is composed of spindle cells and inflammatory cells.
There is no malignant transformation.

Discussion

Lymphangiomas are unusual congenital abnormalities of the lymphatic system. It seems that in appearance these have spread in the population. Examination of available literature shows that abdominal wall lymphangioma is still unusual to find. This is why the diagnosis is difficult but it makes all types of clinical diagnostics and because of this factor ultrasound is also an integral tool in diagnosing the same without incurring more expensive, time-consuming cross-sectional imaging requiring expensive time and expensive procedures for the individual patient [6]. Spontaneous or traumatic haemorrhage may mask the known transillumination test as a result and account for the skin discolouration. There have been spontaneous regressions involving lymphangiomas seen in the head and neck and not the abdominal wall. Injection sclerotherapy or surgery [7] may be considered for the relief of lymphangiomas. Bleomycin may serve as sclerosant depending on the number and structure of individual cysts. Considering that histological diagnosis of these lesions is not available in injection sclerotherapy technique, surgery remains the best modality to treat the lesions; however, the reconstruction of the wall after surgical excision of a massive lesion is still a concern [8]. Use of injection sclerotherapy can be considered in case of a recurrence [9]. However, treatment planning may need to be standardised.

Conclusion

Lymphangioma is a benign tumour caused by a congenital lymphatic malformation, typically presenting distinct radiologic features. Understanding the imaging characteristics of lymphangioma in both common and uncommon locations is essential for making an accurate diagnosis.

Financial Support and Sponsorship

Nil

Conflict of interest

There is no conflict of interest

Patient consent Declaration

Patient's consent not required as patient identity is not disclosed or compromised.

Ethical Approval

Has Institutional Review Board/international Ethics Committee permission been obtain for the study ?- Yes -456

Use of Artificial Intelligence (AI)

Assisted Technology for manuscript preparation
The author(s) confirms that there was no use of Artificial Intelligence (AI)- Assisted Technology for assisting in the writing or editing of the manuscript and no images were manipulated using the AI.

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How to Cite This Article
Tomar S, Saranya R, Khare S, Kumar PD, Sawar S. Radiological assessment of cystic lymphangioma at rare unusual location. International Journal of Research in Medical Science 2025; 7(2): 451-453.